

The Explorer

STATE ROUTE 710 TUNNEL TECHNICAL STUDY

FALL
2009

NEWS UPDATE:

Additional Study Components Proposed

Over the past six months, the SR-710 Tunnel Technical Study Team met with neighborhood councils, communities as well as city councils and other stakeholders. The team was frequently asked why the current Tunnel Technical Study did not include traffic, air quality, noise and portal impact studies, among others. We also had useful input from some elected officials, who pointed out tunnel feasibility should be determined in addition to geotechnical exploration. Caltrans has proposed an expansion of the Study's scope to accommodate these requests. The proposed additional tasks listed below, will be performed at a conceptual level, which will provide information in the screening process. They are not part of the environmental study process, which determines purpose and need for a project and studies impacts in much greater depth.

- Air Quality and Noise
- Cost Considerations
- Portal and Other Impacts
- Traffic Evaluation
- Tunnel Configuration
- Tunnel System Evaluation (Fire-Life-Safety)

The Study's Steering and Technical Advisory Committees have been presented with the proposed scope changes and will provide input to Caltrans. Results obtained from all studies will be shared with the public.

Geotechnical Conditions Studied

The California Department of Transportation (Caltrans) and the Los Angeles County Metropolitan Transportation Authority (Metro) initiated the SR-710 Tunnel Technical Study to gather and analyze data about soil, subsurface and geotechnical conditions. This information will help us know more about rock layering, water levels, faults and other subsurface conditions that might be encountered if tunneling in the Study area, which includes the cities of Alhambra, Glendale, La Cañada Flintridge, Monterey Park, Pasadena, South Pasadena, San Marino, and several northeast communities in the City of Los Angeles.

The Study is comprised of the following:

- 1 The Exploration Program, which includes reviews of previous studies and the collection of new data through soil samplings and sonar testing;
- 2 Analysis of data and findings;
- 3 Determination of next steps.

A New Era of Community Discovery

The SR-710 Tunnel Technical Study takes those who live and work in the Los Angeles region through a new era of community discovery to find out more about the earth beneath us.

Become involved in on-going educational opportunities including presentations to organizations, community events and a second round of community meetings in early 2010.



There will be several opportunities to stay up-to-date regarding the Study. For details, check the website at www.710tunnelstudy.info or call (877) 710-4111.



Extending SR-710 Means Congestion Relief and Improved Air Quality

The Southern California Association of Governments' (SCAG) Regional Transportation Plan has identified the extension of SR-710 as the top priority to improve regional air quality. Since the 1960s, various conceptual plans have been proposed to extend SR-710; however, none were



acceptable to the nearby communities and environmental interests. In 2006, Metro commissioned the preliminary Tunnel Feasibility Assessment Study, which concluded that constructing an underground tunnel to complete SR-710 is feasible. Because a tunnel connection would relieve regional and local congestion and improve air quality, it

gained the support of Metro, Caltrans, the Federal Highway Administration (FHWA) and SCAG.

The SR-710 Tunnel Technical Study will provide more information about soil and subsurface conditions that would be encountered if tunneling at depths of 250 feet or more. In addition,

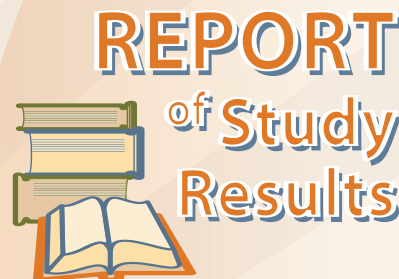
Caltrans and Metro are receiving input from governmental jurisdictions, planning agencies and the communities within the Study area and region. Once the Study concludes, it will provide valuable information and input needed to determine what next steps, if any, are taken to conduct further studies to complete SR-710.

What is Route Neutral?

California Congressman Adam Schiff, District 29, represents several communities who have historically both supported and opposed an SR-710 extension and has sought innovative transportation solutions to meet the region's needs. Recognizing advancements in tunneling technology, he introduced legislation providing \$2.4 million for the SR-710 Study to evaluate a tunnel option to extend the route. The legislation also mandated a "route neutral" approach to the Study. This principle guides the Study's scope and process and means that no one route for a tunnel is being favored over another – all "practicable routes" for extending SR-710 are being considered based on factual data. Congressman Schiff is also a staunch proponent of the public's participation and input to the Study and issued the following statement:

"In June 2008, the President signed into legislation language that requires a Study to be conducted on a tunnel alternative to close the 710 Freeway gap in Southern California. This Study must be conducted in a route neutral manner, defined as "all practicable routes, in addition to any potential

route previously considered". This Study will only be useful if it is conducted fairly, objectively, dispassionately and without a conclusion in mind. It will have no credibility if the community perceives that certain viable corridors were deliberately ignored, others favored without reference to the facts, or that the authors of the report began with the conclusion they wished to reach and worked backwards. It is my desire to avoid this result at all costs, which would not only fail to shed any light on whether a tunnel makes sense and if so, where it might run, but would also represent a tragic waste of taxpayer dollars. This Study offers us the best opportunity to look at this issue anew and for all communities to have a say in where the tunnel should run. When the study is completed, every community should feel that its input on the matter has been analyzed and evaluated fairly."



Once all the data from the testing is gathered and analyzed, a report will be prepared by Caltrans and presented for review to the SR-710 Tunnel Technical Study Steering Committee, the Technical Advisory Committee and the public. In early 2010, meetings will be held in locations throughout the Study area to present findings and results. To be notified, please call (877) 710-4111 or email: info@710tunnelstudy.info

❖ The principle of route neutrality continues to be at the forefront of all Study components.

The SR-710 Tunnel Technical Study Advisory Committees

Two Committees Help Guide Study

Representing the cities and communities within the Study area are two groups of local elected officials, agency and community representatives. These two groups make up the SR-710 Tunnel Technical Study Steering Committee and the Technical Advisory Committee who were appointed by the governing board of each city or agency because of their visionary approach to transportation issues and solutions. Each committee brings forward the perspectives of their communities and provides input and advice to Caltrans and Metro regarding the Study, its scope, final report of results and next steps. Participation on the committees does not constitute endorsement of the SR-710 extension, the tunnel or the views expressed in this newsletter. The committee members are listed below:



STEERING COMMITTEE MEMBERS

Naresh Amatya
Manager Transportation Planning
Southern California Association of Governments

Lynda Bybee
Deputy Executive Officer of Regional Communications
Los Angeles County Metropolitan
Transportation Authority

Mike Cano
Transportation Deputy
Mike Antonovich, Los Angeles County Board of
Supervisors, District 5

The Honorable Stephen A. Del Guercio
Councilmember
City of La Cañada Flintridge

Lee Dolley
City Representative
City of Alhambra

Nicole Englund
Transportation Deputy
Gloria Molina, Los Angeles County Board of
Supervisors, District 1

Borja Leon
Transportation Policy Director
Office of Mayor Antonio Villaraigosa
City of Los Angeles

The Honorable Philip C. Putnam
Councilmember
City of South Pasadena

The Honorable Eugene C. Sun
Mayor
City of San Marino

The Honorable Robert Urteaga
Mayor Pro Tem, City of Montebello
San Gabriel Valley Council of Governments

Edel Vizcarra
Planning and Transportation Deputy
Jose Huizar, Los Angeles City Council, District 14

David Worrell
City Representative
City of Pasadena

Stephen Zurn
Director of Public Works
City of Glendale

To Be Determined
City of Monterey Park

TECHNICAL ADVISORY COMMITTEE MEMBERS

Amir Alam
Senior Civil Engineer
Los Angeles County Department of Public Works
Gloria Molina, Los Angeles County Board of
Supervisors, District 1

Shahzad Amiri
Deputy Executive Officer
Los Angeles County Metropolitan
Transportation Authority

Nicholas Conway
Executive Director
San Gabriel Valley Council of Governments

Pat DeChellis
Deputy Director
Los Angeles County Department of Public Works
Mike Antonovich, Los Angeles County Board of
Supervisors, District 5

Lee Dolley
City Representative
City of Alhambra

Richard A. Gutschow
Geotechnical Engineer
City of South Pasadena

Paul Habib
Public Projects/Capital Infrastructure Manager
Jose Huizar, Los Angeles City Council, District 14

Bahman Janka
Transportation Administrator
City of Pasadena

Philip Law
Corridors Program Manager
Southern California Association of Governments

Thomas E. Mitchell, P.E.
Assistant Traffic & Transportation Administrator
City of Glendale

Pratheep Piratheepan
Geotechnical Task Lead
Caltrans District 7

The Honorable Eugene C. Sun
Mayor
City of San Marino

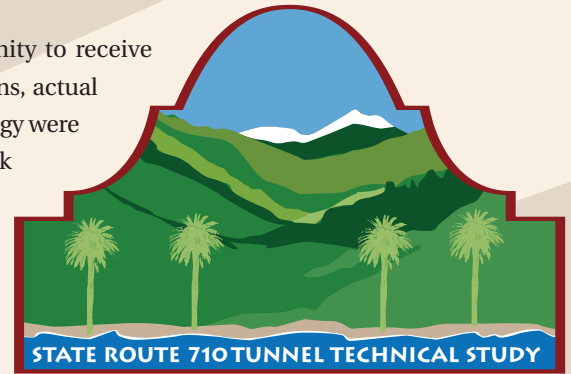
Ann Wilson
Senior Management Analyst
City of La Cañada Flintridge

June Yotsuya
City Manager
City of Monterey Park

Local Residents Give Input

Caltrans and Metro have hosted several meetings to provide residents the opportunity to receive information about the SR-710 Tunnel Technical Study. Displays of geological conditions, actual soil samples taken from depths of 250 feet and the latest information on tunnel technology were available. Most importantly, this first round of forums has allowed the public to ask questions and voice opinions about the Study and extending SR-710.

The following are highlights of community meetings held over the last few months in cities within the Study area. Caltrans and Metro would like to thank all attendees for making these gatherings so valuable. As the Study concludes, another round of meetings will be held to discuss results of geotechnical testing and next steps.



South Pasadena Asks About Next Steps

Over 100 people attended on February 25, 2009 at the South Pasadena Library. Following comments by Kenneth Sidle, Chairman of the South Pasadena Transportation Commission, and Doug Failing, Caltrans District 7 Director, staff presented the Study efforts and residents engaged in a question and answer session with Study team members. Meeting attendees learned about the Study process and soil testing conducted in South Pasadena, next steps and the meaning of route neutral. Much interest was expressed about tunnel ventilation systems, local geology and its influences on tunneling, potential costs and funding sources. Attendees stressed the need to report Study research findings to the community. Caltrans agreed and stated that there will be another round of community meetings to share the Study results and next steps.

El Sereno Residents Seek Education

More than 200 El Sereno residents, stakeholders and elected officials gathered on March 26, 2009 at the Los Angeles Christian Presbyterian Church. Caltrans invited the public to view informational displays and receive feedback in one-on-one conversations with Study team



members. After comments by State Assemblymember Kevin De Leon, District 45; Los Angeles City Councilmember Jose Huizar, District 14; and Doug Failing, the community heard details about the Study. Opinions were voiced about the impacts that a possible tunnel would have on their community. Specifically, they asked about where the tunnel would begin and end and how homes and businesses near the portal areas would be affected. Additional questions were asked about air quality impacts and status of Caltrans-owned properties if a tunnel were to be built. Caltrans staff addressed many of the community's questions and concerns, though some issues relating to tunnel impacts can only be addressed by further environmental study. El Sereno residents repeatedly stated, "Keep us informed." Many said they would like to be involved in the Study through more outreach and with more opportunities for input.

Pasadena Inquires About Process

More than 50 Pasadena residents and stakeholders attended on April 28, 2009 at Blair High School. Many participants wanted to know what will happen after the Study is completed, specifically if there will be an environmental study process. Caltrans stated that it has not been determined whether an environmental study will be initiated. Steps of the environmental process were generally explained. Questions were asked if Caltrans-owned properties would be sold if an at-grade freeway extension is abandoned. Doug Failing stated that these decisions could only be made during an environmental study process and certainly,



the California governor and legislature would weigh in on the possible sale of Caltrans-owned properties. In addition, attendees expressed interest in tunnel design and technologies used in the United States and around the world, particularly advanced tunnel technology for ventilation, exhaust treatment and greenhouse gases.

La Cañada Flintridge Questions Need for Tunnel

Over 150 people, some who stated concerns about a tunnel's potential for increasing vehicle emissions, attended this meeting, held on May 26, 2009 at



Lanterman Auditorium. Many supported freight movement by rail through the corridor instead of a tunnel while others opposed all reasons to connect SR-710. In Mayor Laura Olhasso's opening and closing remarks, she urged residents to stay informed and involved in the Study.

Local Residents Give Input (continued)

Glendale Encourages Public Involvement

On May 27, 2009, Ara Najarian, Glendale City Councilman and incoming Chairman of Metro's Board of Directors, told an audience of 35 people at the Glendale Public Library, that now is the time to



listen, ask questions, and share ideas and opinions about the Study. He also praised Doug Failing for his efforts to improve mobility in the Los Angeles region. Concerns were raised that a tunnel connection to I-210 would only increase traffic in the area and impact Glendale. Caltrans responded that in-depth traffic studies and route selection are completed during an environmental study. Additional questions and comments focused on earthquake faults in the Study area and past seismic activity. Geotechnical experts explained that several Metro Red Line tunnels cross active faults and are designed to absorb movement.

Monterey Park Supports Study

A smaller, but very interested and supportive audience participated in the May 28, 2009 meeting held at City Hall. Attendees asked many questions about soil and subsurface conditions in the area and how the latest technology would be applied for a tunnel. Many wanted to know what the next steps would be regarding

timing for an environmental study and construction of a tunnel extension. Caltrans stated that if the SR-710 extension is agreed upon, then the environmental and design process could take up to five years before construction begins.

San Marino Learns About Geology & Tunneling

Mayor Eugene Sun encouraged participants to be informed and involved in the Study effort. Participants asked if there were any geological factors that would prohibit tunneling. Geological experts stated that tunneling is possible through most geological conditions; there is no single factor or issue that would preclude a tunnel from being built. The problem, according to experts, is tunneling in an area where there is a combination of adverse conditions such as faults, methane gas, hazardous materials or contaminated water.



Alhambra Sees Study as First Step

Mayor Steven Placido opened the June 4, 2009 meeting held at the city library by stating that the Study is an important first step to finding a solution to relieve traffic congestion in their city. Discussion covered many topics ranging from soil testing methodology and soil conditions to tunnel design. Some attendees wanted to know about the location and depths needed to accommodate a southern



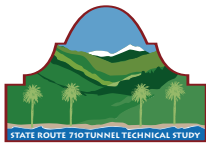
tunnel portal and possible impacts on homes and businesses. Others wanted to know the timing and steps needed for project construction and funding. Caltrans stated that these important questions and concerns would be addressed if an environmental study were to be conducted.

Northeast Los Angeles Voices Heard

Well over 100 people from the communities of Glassell Park, Highland Park, Elysian Park, Arroyo Seco/Hermon and Lincoln Heights attended the June 16, 2009 meeting at Ramona Hall. Many questions and concerns were raised about the need, purpose and funding for a tunnel extension. Other attendees wanted to see transportation options pursued to reduce regional and local congestion as well as truck traffic. Doug Failing stated that regional studies supported the completion of SR-710 as having significant air quality and mobility benefits. He added that more detailed studies would address the impacts and benefits of several routes should an environmental study be initiated.



> > > Visit www.710tunnelstudy.info for summaries of public and stakeholder input from all community meetings.



SR-710 Tunnel Technical Study

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Email: info@710tunnelstudy.info

Website: www.710tunnelstudy.info

Call: (323) 222-1710 or
(877) 710-4111 (toll free)

Please contact the SR-710 Tunnel Technical Study Office with questions, comments or input. Check the website for upcoming public outreach meetings and presentations.

Exploring The Exploration Program

Through the analysis of the soil samples, now underway, the geotechnical Study team will identify the approximate composition, structure and other geophysical properties of the soil, rock and other matter at depths of 250 to 500 feet. The outcome of the soil testing will allow the geotechnical Study team to use the new data to determine tunneling conditions in specific areas.

The Exploration Program was comprised of three types of subsurface tests: 1) Boring 2) Seismic Reflection and 3) Surface Wave.

From January to May 2009, Caltrans led the Exploration Program to find out more about the soil conditions in the SR-710 Study area, and collected soil samples for lab testing and analysis. Exploration activities were conducted within specific geographic areas including the cities of Alhambra, Pasadena, South Pasadena, San Marino and several northeast communities in the City of Los Angeles.



Boring required a drilling rig with a hollow auger, a device that rotated through the soil or liquid and brought up 6-inch diameter core samples from depths between 200 feet and 500 feet. Core samples are now undergoing laboratory testing for identification of soil, rock and other matter and their layering (or strata).



Seismic Reflection testing created gentle vibrations in the earth within a controlled area, similar to sonar. As vibration waves began, geotechnical engineers noted the time it took the vibrations to reach a listening device, called a sonar receiver, used to determine soil depths and water levels.



Surface Wave testing collected an electronic image of soil conditions along a specific area. Information was gathered on rock layers, near-surface faulting, subsurface voids and bedrock elevations or depths.

FACT:

The world's longest roadway tunnel - a length of 15.23 miles - is in Norway.

China's Shanghai-Yangtze River Tunnel was excavated by a 50-foot diameter tunnel-boring machine, the largest in the world.